

The *Shock* of the New:

**Changes in the Generation, Transmission, and Distribution of Electricity in
Montana**

A Situation Report
prepared for the
Electric Industry Restructuring Transition Advisory Committee
by Research Analyst Stephen Maly

November 20, 2000

Prepared by
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TABLE OF CONTENTS

Preface: A Double Caveat	2
Introduction: Plugging Along, but Fogged	3
Backing Up: The Committee and its Activities.	5
A "Muddled and Prolonged" Transition.	8
Shape-Shifting Conditions & Contingencies	12
What is to be Done?	36
Conclusion: Brave New World or A Dimly Lit Future?	50
End Notes	54
Appendix 1: Chronology	
Appendix 2: Roll On/Over Columbia	
Appendix 3: Electrical Industry Restructuring in a Nutshell	
Appendix 4: Memo to: Members of the Montana Legislature	

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Committee by Research Analyst Stephen Maly, November 20, 2000

Preface: A Double Caveat

This report is intended to fulfill provisions in Title 69, Chapter 8, Part 5 of the Montana Code Annotated that require the Transition Advisory Committee to submit an analysis of the transition to full retail competition and recommend, if necessary, legislation to ensure that "effective competition" is achieved. More specifically, section 69-8-501(11), MCA, specifies that the annual report for 2000 "must include legislative recommendations, if it appears appropriate, about the best means to further encourage the development of customer choice and meaningful market access for the benefit of smaller customers. Notwithstanding this statutory directive, and with deference to its "appropriateness" escape clause, very few formal recommendations are contained in this report, in large part because the Committee has not made them, but also because:

(a) Everything in Montana's electricity situation is in a state of flux. By the time this document is printed and distributed, something of substantive importance will likely have changed a little, or a lot (whether we realize it or not); and,

(b) every subject touched on in this report is connected. Separating any significant element of electric power from The Big Picture of weather, water, private wealth, public well-being, tax policy, energy policy writ large, and the letter of the law is like cutting the suspenseful scenes from a Hitchcock movie and still calling it a thriller. Restructuring is a multi-faceted evolutionary process that involves the interaction of state law, national policy, and emergent regional bodies, all of which depend in various ways

on the business decisions of private companies and local governments, and on the largely unpredictable behavior of individual consumers. The complications are generating a buzz.

I. Introduction: Plugging Along, but Fogged Up

The restructuring of Montana's electrical industry is proceeding in general accordance with legislation passed in 1997 and 1999.ⁱ For example, a number of large industrial consumers of electricity have since 1998 been purchasing power in an unregulated market, and some realized significant cost savings prior to the unexpected price spikes in the summer of 1999. The League of Cities and Towns has aggregated more than 150 local government energy accounts to gain leverage in attracting a competitive supplier. In addition, the Public Service Commission has promulgated consumer protection rules and established procedures for the licensure of power suppliers. One supplier specifically targeted residential and small commercial customers to enroll in choice. Montana Power Company customers' bills have been "unbundled", allowing consumers to see how much they are paying for electricity itself, as distinct from transmission, distribution, and other charges. Conservation, renewable energy, and low-income assistance programs are being supported by Universal System Benefits Charges. Residential and small commercial customers in MPC's service territory have benefitted from a rate moratorium on delivery charges which ended July 1, 2000. A moratorium on electric supply rates remains in effect until July 1, 2002.

However, several of the important stages in the transition process that are set forth in or otherwise anticipated by the restructuring laws are bogged down in litigation and procedural wrangles. More often than not in this

ⁱ Senate Bill No. 390, Chapter 505, Chapter Laws of 1997; Senate Bill No. 406, Chapter 575; House Bill No. 211, Chapter 185; House Bill No. 174, Chapter 556; and House Bill No. 337, Chapter 580, Laws of 1999.

interim, members of the Transition Advisory Committee have been unable to openly discuss key policy questions because they were embroiled in a lawsuit, caught up in a contested case proceeding, or engaged in a transactional procedure requiring strict confidentiality.ⁱⁱ Meanwhile, national restructuring legislation is stalled, and sharp wholesale price increases, especially in California and the Pacific Northwest states, have slowed if not stopped altogether what seemed to be an inexorable drive toward retail choice throughout the West. In other words, while the statutory transition process may be generally on track, it is most definitely off pace.

During the course of the 1999-2000 interim, the Transition Advisory Committee (TAC) and the Public Service Commission (PSC) have not moved forward on schedule with rulings and policy prescriptions. The period between the 56th and 57th (upcoming) Legislatures could be characterized as a "congested case proceeding". This situation is partly due to the intramural disputes mentioned above, but more generally it is the result of a cloud of unknowing that has enveloped most parties to the process. The TAC as a whole has not been able to foresee certain important actions and decisions affecting the prospective price and continued reliable supply of electricity for the approximately 288,000 residential and small commercial customers of the Montana Power Company (MPC).¹ Committee members, like the broader public, have found themselves in the awkward position of reacting to media releases rather than deliberating choices in advance of relevant, newsworthy events. The force of this circumstance is one reason why the Committee's official recommendations will be spare, insofar as this report is concerned. The fog may be lifting, but the path to choice requires some truing up before the TAC can deliver clear signals to the Legislature as a whole.

ⁱⁱ Picture a football team, moving slowly down field towards the goal post, and fighting with each other all the way.

II. Backing Up: The Committee and its Activities.

The Transition Advisory Committee was created by Senate Bill 390 in the 1997 Legislature. The Committee is composed of 24 members, 12 of whom have voting privileges and are Montana legislators--six from each house.ⁱⁱⁱ The voting membership is bipartisan; i.e., there are equal numbers of Republicans and Democrats. In addition, there are 12 nonvoting advisory representatives that embody a cross section of groups interested in the process of partial deregulation of the electrical industry. These members are appointed by the Governor or other stakeholder organizations to serve on the Committee in an advisory capacity.^{iv}

The TAC must meet at least quarterly, and may meet as often as necessary (within budgetary constraints) to conduct its business. Senate Bill 390 set forth a number of functions and duties of the TAC that are ongoing. These items are codified in Title 69, Part 8 of the Montana Code Annotated, and include an annual report to the governor and legislative leaders on the transition to effective competition in the electricity supply market. By the time of this writing, the TAC had met 6 times in the 1999-2000 interim, and had an additional meeting scheduled for December 7.^v The Committee may also choose to conduct further meetings during the 57th Legislative Session.

The financial support for the TAC comes exclusively from private sector contributions made to the Legislative Services Division for the Committee's use. The 1999 Legislature appropriated up to \$100,000 for the Committee during this interim. The Montana Power Company donated \$50,000; PPL-Montana contributed \$5,000, and Avista Corporation gave \$2,500. Each of

ⁱⁱⁱ House Bill No. 404, Chapter 372, Laws of 1999, increased legislative membership on the TAC from 8 to 12. This facilitated the seating of members who did not vote in favor of SB 390 in 1997.

^{iv} See the TAC web page at http://leg.state.us/Interim_Committees/TAC for a list of all the members and their affiliations.

^v The agendas, Minutes, and various reports for these meetings are available in hard copy from staff on request, or may be accessed via the web page in footnote #4.

these firms have a seat on the Committee.^{vi} Expenditures will likely not amount to the total authorized by appropriation, and the TAC adopted a policy to return the remainder to the donors on a prorated, proportional basis at the end of the interim, which occurs on June 30, 2001.^{vii}

At its penultimate meeting on October 6, 2000, the legislative members of the Committee, through a series of motions, resolved not to recommend any substantial changes in law to address current or foreseeable challenges except the following:

- A 2-year extension of the Universal System Benefits Program, which was scheduled to terminate in 2003.^{viii} Universal System Benefits Programs (USBPs) were established in 1997 to ensure continued funding of and new expenditures for energy conservation, renewable resource projects and applications, and low-income energy assistance during and after the transition period.
- A clarification in statute to ensure that amortized debt service expenditures for conservation programs in the past can qualify as a USBP credit.^{ix} The rules adopted by the Department of Revenue for the determination of allowable credits had given rise to controversy over whether the Legislature intended that past expenditures would qualify.

^{vi} PPL Montana's representative serves in an *ex officio* capacity; this obviates the need to increase the number of members by statutory change.

^{vii} This motion was passed in response to a Jan. 11, 1999 Memo to fellow members of the Committee from Rep. Royal Johnson.

^{viii} Section 69-8-402(2), MCA.

^{ix} Section 69-8-402(2)(b), MCA.

A motion to recommend a statutory extension of the transition period for 2 years failed on a 6 to 5 vote. Under current law, the Public Service Commission has the authority to extend the transition to July 1, 2004, so long as certain conditions are extant.^x On October 27, 2000, the PSC made public its intention to do just that, and has invited public comment on its reasoning and proposals. Montana Power Company's contract with PPL Montana expires, on June 30, 2002. After that date, the distribution utility, will be in the position of having to purchase electricity in an unregulated wholesale market and supply it to customers at a regulated price. This is not novel or strange: the Montana Power Company and other utilities have purchased and traded in competitive wholesale markets to serve a regulated customer base, passing the costs through to customers with PSC approval. However, neither MPC nor the PSC has experience with a situation in which the utility buys every bit of what it needs to serve its Montana load from the competitive market.

Uncertainty is the watchword of this phase of the transition period. For the time being, in light of the difficulty of assessing the consequences of any major change in the restructuring statutes, the TAC is staying the course that is set forth in current law, and bracing itself for the 2001 Legislative Session. What will the winter bring--mild and wet weather, foretelling a good water year in the Northwest, or a bitterly cold season, with a foretaste of rolling brownouts and spiking energy prices? How many months will it take for MPC to close on its sale of electric and gas utilities to NorthWestern Corporation?^{xi} What and when will the Montana Supreme Court decide with respect to the lawful method of calculating MPC's competitive transition costs, also known as "stranded costs", and how much will the stranded costs actually amount to, when the PSC makes that final determination? (See page 9.) What will the next President of the

^x Section 69-8-201(2)(b), MCA.

^{xi} The sale of the company's generation assets took over a year to conclude.

United States and, more importantly, the next session of Congress do about restructuring on a national basis? And, given the unusual number of legislative seats and constitutional offices that will change hands in Montana in this election year, what kinds of changes are in store for the TAC itself, as current members' terms expire, on January 1, 2001?^{xii}

III. A "Muddled and Prolonged" Transition.

Electricity industry restructuring appears to be going haywire. The adjectives in the subheading above were used to describe the general state of electricity restructuring across the United States.² The Clinton Administration's proposal for federal restructuring legislation languished in Congress, as did alternative Democrat and Republican bills. The *Washington Post* reported that nine of the nation's largest utilities got together last year and spent \$17 million on a lobbying effort, code-named The Project, to ensure that any federal deregulation bill gets hopeless stalled in committee.³ The focus of the next Congress will likely shift to transmission system inadequacies, rather than retail choice on a national basis.⁴ Coalitions of populous states and special interests groups may also seek to deconstruct federal power marketing agencies, such as the Bonneville Power Administration, which would further complicate regional efforts to adjust to a competitive market environment for electricity.

The forward momentum of restructuring advocates has carried the country a long ways in the last 3 years. In addition to the 24 states that have legislation passed or pending (and in which over half the U.S. population resides), most of the rest have regulatory orders in play, or studies underway.⁵ However, California's recent debacle (described in Part IV) has spurred actions to slow or reverse partial deregulation in Nevada, New

^{xii} Section 69-8-501(6), MCA.

Mexico, Minnesota, Alabama, North Carolina, and several other states. In the greater Northwest region, Montana is the only state to have adopted retail choice: Idaho, Washington, Wyoming, and South Dakota have so far steered clear of restructuring, while Oregon has allowed large industrials to shop for power but stopped short of opening residential markets to retail competition.⁶

There is tremendous unevenness in the way restructuring is playing out in other parts of the country too. Industrial customers in Massachusetts, Pennsylvania, New Jersey, and Maine, for example, have happily switched suppliers to gain access to lower-cost deals. On the residential side, Pennsylvania sports the largest proportion (10 percent) of customers that have exercised choice, and while these folks have experienced an average drop of 3 percent on monthly bills, they have yet to be exposed to genuine market prices.⁷ In nearby New York state, people in counties where market prices *did* prevail suffered a 40 percent increase this summer. In Connecticut, no customers have chosen competitive suppliers in the first seven months that the market has been open, even though that state's rates are among the highest in the country. In the Midwest and South, some states are moving forward tentatively, others are standing pat with the status quo, a few are backing away from earlier decisions to deregulate.

The muddle is gaining notoriety. So far the most visible effect is heightened anxiety and broadened interest in precautionary maneuvers. California's pricing predicament, the looming prospect of fuel oil shortages, high gasoline and natural gas prices, and insufficient transmission and pipeline delivery systems, have all brought a slow awakening of concern on the part of America's residential consumers.

Here in Montana, the transition is in suspended animation, and has been for many months. An earlier staff report to the Committee, issued in January, 1999, contained the following summary observation:

In the middle of the transition period, many Montanans find themselves in a bit of a muddle. The first phase of the process has been complicated by unexpected turns of events, the most important of which was Montana Power Company's decision to sell its generation assets. This was followed by a protracted period during which the details of MPC's sale to PP&L Global were negotiated and finalized. The torpid pace of the transaction caused the PSC to hold MPC's transition plans in abeyance. Pilot programs and customer education efforts slowed. Arguably, there is no real incentive for suppliers of electricity to serve Montana's residential and small commercial customers until MPC's stranded costs have been hammered out.⁸

What has happened in the year since reinforces expectations that the transition period will be further prolonged. As mentioned above, the PSC has already announced its intention to extend the "deadline" for customer choice another 2 years. Here's another example of delay: What's called the "Tier 2" portion of MPC's transition plan filing with the PSC includes a question of whether so-called stranded costs are to be calculated once and for all, as the PSC and the Large Customer Group^{xiii} interprets the law to require, or whether they can be calculated and collected on an ongoing basis, using a "tracker", which is the position MPC has taken.^{xiv} (With power prices fluctuating dramatically, a bad guess at the cumulative total will either leave customers or the company in a costly lurch.) The most significant stranded costs at issue are long term contracts between MPC and a number of non-utility power producers, known as Qualifying Facilities, or Qfs.⁹ The Montana Power Company's estimate of the value of the

^{xiii} The Large Customer Group currently consists of the following: Holnam, Inc., Montana Tunnels Mining, Inc., Conoco Inc., Montana Refining Co., Louisiana Pacific Corp., Asarco, Inc., Ash Grove Cement, Golden Sunlight Mines, Inc., Stillwater Mining Company, and Smurfit-Stone Container Corp.

^{xiv} Details about various parties' positions can be obtained from the Public Service Commission. Refer to Docket No. D97.7.90 (MPC).

stranded costs associated with its fifteen Qf contracts^{xv} is \$400 million. If approved by the Commission, this is how much MPC's recent and present customers-- industrial as well as residential and small business--will pay in installments as a Competitive Transition Charge, or CTC, over the next 15 years or so. However, present and forward market prices are higher than the Qf contract prices, so most if not all of these stranded costs could be eliminated. The uncertainty surrounding this number, and what the Montana Supreme Court will decide on the tracker issue, is one reason why large industrial firms have been reluctant to enter into long-term supply contracts. As noted in the Chronology at APPENDIX 1, this reluctance has proven to be pricey.

While the large industrials and the Commission have been duking it out with MPC over stranded costs, smaller customers have been left stranded in a different, composite way. By and large, they are:

- Not yet exposed to market prices;
- Not fully informed (with customer education taking a back seat to more pressing matters);
- not really interested yet, with 2 years of cushioning to go (no requirement to choose; rate moratorium still in place)
- increasingly anxious about the longer-term results (thinking, for example, about the unwelcome effects of skyrocketing utility bills on a middle-aged couple's early retirement plan);
- dis-aggregated, for now, meaning there's not much bargaining power when you're spread across the map; and
- not attractive, so far, to competitive suppliers (as evidenced by the dearth of licensed entities proclaiming an interest in serving this market--see pages 19-21) .

^{xv} Eleven are small hydro dams, two are thermal cogeneration facilities, and two are wind projects.

It is important to keep in mind that deregulation does not apply across the board in Montana. In 1997, Montana-Dakota Utilities secured the option to delay its entry date until July 1, 2002, with a transition period that may last until 2006.^{xvi} The Rural Electrical Cooperatives may open their systems to competition, but so far all but two,^{xvii} Glacier Electric and Flathead Electric, are choosing the safer course of serving their customers through multi-year contracts with the BPA and another federal agency, the Western Area Power Administration (WAPA), as well as with a Basin Electric, a North Dakota -based cooperative.^{xviii} Customers of MDU and the Coops are, for the moment, shielded from downside effects of market instability, but there is no telling what may happen in the longer term, especially if the federal power marketing agencies are disrupted from within or done away with by an unfriendly act of Congress. (See "A Vulnerable Giant" on page 26.)

IV. Shape-Shifting Conditions & Contingencies

In general, electrical industry restructuring calls for splitting power generation, transmission, and distribution into distinct businesses and allowing the generation companies to compete at the wholesale level. The benefits of retail choice hinge on effective wholesale competition, which is largely the domain of very large energy conglomerates (like Enron, Bonneville Power, and British Columbia's Power Exchange), big transmission entities (which are gradually consolidating into even bigger, regional transmission organizations), and one sizeable policing authority (the Federal Energy Regulatory Commission). Theory holds that the freeing up of

^{xvi} Section 69-8-201(4). This provision also allows MDU to petition the PSC to delay the starting date until 2004.

^{xvii} Glacier Electric, and Flathead Electric, both in the northwest quadrant of the state.

^{xviii} Flathead Electric Cooperative and its for-profit affiliate, Energy Northwest, do not qualify for BPA's lowest priced power. In addition, the price they pay for electricity generated by a small hydro supplier, under a market-indexed contract, has risen from \$20 to \$100 per Megawatt-hour in recent months--a portent of the future absent the availability of cost-based federal power contracts.

wholesale and retail choice will drive prices down for the commodity supply component (the actual electrons) of a utility bill, which can be the highest cost portion of an energy-intensive industrial plant's energy bill, but typically accounts for 30-40 percent of the total electric bill for residential and small business consumers. The Clinton Administration estimated a \$20 billion savings annually.

The general expectations of free market economists and federal policymakers notwithstanding, some structural conditions in the electricity market today were not contemplated by Montana lawmakers. The 1997 Legislature did not know in advance of acting on SB 390 that the Montana Power Company *would* sell its hydroelectric dams and power plants.^{xix} In retrospect, this was a momentous event--when the figurative wire connecting power generation and transmission and distribution services was cut, not only exposing Montana consumers in all customer classes to unregulated regional wholesale prices at the end of the transition period, which was expected to bring lower prices, but more importantly making the restructuring process all but irreversible. The Legislature was taken by surprise once again when MPC announced its decision to exit the energy business altogether by selling off its transmission and distribution utilities and devoting the entirety of its human and financial resources to its telecommunications affiliate, Touch America. At least some members of the 1999 Legislature were not convinced, in the process of enacting a bill that created the Montana Electricity Buying Cooperative, that the BPA would later reach a decision practically eliminating the chance that the new nonprofit could successfully aggregate MPC's small customers and provide them with low-cost federal power.

^{xix} Senate Bill No. 390 did contain provisions, however, which signaled that a sale of generation assets *could* take place. See 69-8-204(2), MCA.

Critical observers and some consumer advocates argue that Montana's lawmakers walked into restructuring with eyes wide shut, and have sacrificed the nation's fifth or sixth cheapest electricity rates on the altar of an economic ideology that doesn't always fit Montana's unique geographic circumstances. Supporters of deregulation contend that Montana businesses as well as elected leaders have been blind-sided by a barrage of unanticipated decisions and events, and that the market will correct itself in reasonably short order. Some people hold the view that while restructuring is the rational course of action, because, in their estimation, wholesale deregulation makes it inevitable, and also because the economic and environmental benefits will eventually outweigh short-term adjustment costs, Montana simply jumped the gun, taking a "ready, go, get set" approach when a more cautious one would have been more prudent.^{xx} In any event, the outcome of the restructuring process hinges on a number of contingent factors briefly described below, only some of which are susceptible to legislative activity at the state level.

OThe California Debacle, and its Fallout

California was (and still is) the pioneer of restructuring in the West. Pioneering has proved to be risky business. This past summer, San Francisco area residents suffered rolling blackouts while their fellow citizens in San Diego were hit with power bills that tripled almost overnight. More generally, since June of 2000, wholesale prices for electricity increased 270 percent over the previous year.¹⁰ This precipitated what might be an unprecedented event: public officials advising consumers not to pay their utility bills. The California Legislature has since passed a series of measures to roll back prices and one of the sponsors of the restructuring bill is now arguing for its repeal. The state's leaders are wracked with the pain of

^{xx} Credit for this image and phraseology, more favorably suited to entrepreneurial initiatives, goes to TAC member Senator Mike Sprague.

indecision. As a member of the California Energy Commission put it recently, "We have one foot in the regulated world, one foot in the market, and a legislature that keeps changing its mind."¹¹

Authorities are also looking for someone to blame. Investigations of California's wholesale price run-up have been conducted by FERC, the state Public Utilities Commission, the Attorney General, the Electricity Oversight Board, and the Legislature. So far, none have turned up convincing evidence of illegal market manipulation by investor-owned utilities, but they have spawned some inventive terminology, such as "megawatt laundering", and the debate over the causes of the debacle continues.¹² Moreover, the expectation that the summer of 2001 may be even worse is fueling a flurry of restructuring reform measures, from instituting wholesale price caps to issuing consumers' refunds to streamlining plant siting processes to rewriting the rules by which utilities buy and sell power.

The situation in California is fascinating, complicated, and relevant to Montanans' fast-approaching exposure to market prices. In a market-driven environment, the biggest-volume purchasers command the best price. Because wholesale prices are a reflection of supply and demand in the most heavily populated areas in the West, fixing what has gone wrong in The Golden State is a prerequisite for price stability and predictability in the most populous parts of the Treasure State.

ONorthwest Price Spikes: Causes and Effects

The sudden escalation in spot market prices that afflicted California also had consequences in the Pacific Northwest. Bonneville made some \$500 million selling its surplus in the California market, but several large aluminum plants in Washington were forced to cut production and lay off workers when the spikes hit. In Montana, the sharp and sudden increase in regional

wholesale prices had a dramatic impact on a pulp mill, a cardboard container plant, an oil refinery and a copper mine. (See Chronology at Appendix 1 for more details.)

Why did this happen? The causes are complex, and interactive; they are rooted in short-term and long-term phenomena, including the following:

Short-term

- The Northwest experienced a "strange" hydrographic year, in that much of the region's snowpack melted quickly, and earlier than usual. Consequently, the BPA system generated 5,000 fewer average megawatts in June, 2000, than it did in the same month in 1999.
- At the same time, high summer temperatures throughout the West, and particularly in California, caused demand to swell above normal. (The drought in Montana reduced the flow through PPL Montana's hydro turbines, contributing to the region-wide shortage of power in periods of peak demand.)
- The Summer of 1999 also brought planned outages (such as routine maintenance at Colstrip) and unplanned ones (such as technical problems at a Washington nuclear plant as well as at Colstrip). About 3,000 MW were out of service in the last week of June.
- Regulatory constraints on forward contracting, price freezes, and the California Independent System Operator's policies all conspired to exaggerate the volatility of the initial price increases brought on by supply/demand imbalances in the California market. Shock waves radiated out from California to affect prices region-wide.

Longer-term

- Declining reserve margins for utilities that own generation facilities, owing to robust growth in the demand for electricity, and because regulated power prices have been too low in recent years, from a private industry perspective, to support the development of new generation plants. (Curiously, other business executives hold the view that deregulation makes utilities even more risk averse and unwilling to build new plants, since there is no guarantee of a return on investment and no captive customer base like there was under state-regulated monopolies. However, non-utility generators may not be as reluctant to make investments.)
- Higher natural gas prices, which have doubled in the past year and are expected to rise even further, largely because this is the fuel of choice for most new power plants and because of the overhanging effect of oversupply (the so-called "gas bubble"), which has suppressed exploration and drilling activity for the past decade.¹³ The limited capacity of natural gas pipelines is another cause for rising prices, as the inability to move the gas to where it's most in demand is similar to the transmission constraints in electricity.
- The consolidation of energy companies, leading to a concentration of market power and the ability to "game the system" by temporarily withholding power in periods of high demand in order to take advantage of sharp increases in spot market prices.

There are other causes to consider, rooted in the structure of the market, and in the particular way in which California designed its restructuring institutions and processes. Details aside, there is a general understanding among interested observers that a fully functioning market has not materialized yet, and conditions prevent its easy or quick evolution. The

result is, allegedly, profiteering and price manipulation by suppliers, and the avoidance of rational, energy-conserving behavior by consumers because they have by and large not been receiving genuine market price signals.

OContours of Supply and Demand

No major plants have been built in California or the Northwest for the last 10 years. California rolled out its deregulation legislation at a time when consumer demand was surging. Suppliers were unwilling to keep up.¹⁴ In the hot summer months, Californians depend on imports from Bonneville and British Columbia. To the extent the BPA has energy available that is surplus to the region's needs (as determined by multi-year contracts for preference customers and occasional in-region auctions), it exports to California at market prices.^{xxi} These sales have a dampening effect on Bonneville's cost-based rates in the Northwest, and help ensure that the agency makes its payments to the U.S. Treasury. At the same time, economic growth has been robust in the Northwest, and certain groups within the region do not share BPA's perspective; they view sales to California as a drain on the system and advocate an in-region reallocation of the surplus.

Bonneville is not allowed to supplement its resource base by building new generation facilities. It is also constrained from directly inducing such developments, e.g., through advance, high-volume purchase orders, since similar behavior in past years brought about the boondoggle of overbuilt nuclear capacity.^{xxii} So, Bonneville itself has become a net purchaser of electricity, and will likely remain so for the foreseeable future. This is partly

^{xxi} Bonneville's power is always offered a day ahead to Northwest customers; only when there are no takers is electricity sold out of the region.

^{xxii} The "constraint", per se, is that the 1996 Regional Review strongly advised BPA not to underwrite new generation through advance purchase contracts. Strictly speaking, the 1980 Northwest Power Act allows "resource acquisition" on the part of Bonneville.

because of economic growth in the region, but also because the Columbia River system's generating capacity is limited by costly obligations to recover salmon and provide irrigation and other benefits. BPA will have to purchase about 3,200 megawatts to meet current load requirements and forecasts. Without this additional power, the Northwest Power Planning Council (NWPPC) has projected that there is an estimated one-in-four chance that brownouts will occur in the Northwest this winter, and in winters to come. This means Bonneville's prices have to go up accordingly, to meet the cost of acquiring energy from other suppliers.¹⁵

Rising prices are stimulating interest and activity on the part of power marketing firms. According to the NWPPC, there are a dozen projects amounting to about 6,000 Megawatts under construction in the West. Three of these, adding up to about 1,500 Mw, are in the Northwest region. Another ten power plants are going through the permitting process. It generally takes 2-3 years for a gas-fired facility to be planned, permitted, and built--provided the turbines are available on the market. So the supply problem in California and the Northwest may be relatively short-lived. On the other hand, it could be prolonged by political decisions reached on the assumption that restructuring and a shortage of power generation are integrally linked. Ralph Cavanaugh, a spokesman for the National Resources Defense Council^{xxiii} commented recently that deregulation is being unfairly maligned because the dearth of power plants has made it impossible for customers to benefit from competition, and that a more orderly market will develop once the supply is fixed.¹⁶ **The Economist** reached a similar conclusion in its August 26, 2000 edition, observed that "the main reason why prices rocketed is that there is not enough supply available. The obvious remedy is to provide incentives for new supply. But caps discourage new generation." This view is congruent with what some California utilities are arguing: that if regulatory authorities keep monkeying

^{xxiii} Mr. Cavanaugh has participated in several TAC meetings over the past two interims.

around with wholesale price restrictions, then no new plants will actually get built.

This situation poses a seeming dilemma: how high must prices go, and how long must they stay high, to bring additional generation on line--and not just on paper? There is a very different perspective on the supply side: the specter of overbuilding, which may bring joy to consumers but agony to investors. This kind of volatility is commonplace in many commodity markets, but the immense capital costs associated with power plant production, the critical role of well-functioning transmission systems, and the associated fact that electricity is a commodity that cannot be stored up and placed in inventory, make the electric power market especially risky.

There are other, practical problems associated with building new power plants. The FERC expects that 90 percent of new electricity supply in the next decade will come from gas-fired generating turbines, and by 2020 natural gas will supply 60 percent of America's generation plants. The agency has certified 6,000 miles of new gas pipelines since 1997, and the Canadians are busily adding to the north-south pipeline infrastructure. While natural gas is fairly abundant in North America, prices for it have doubled in the past year. They are likely to go up some more, according to industry projections. So, on the fuel side of the ledger, costs are rising fast. On the technology front, combustion turbines are in very short supply. General Electric, the foremost manufacturer, has back orders for the next 5 years.

The demand for gas is also tied to the relative decline or renaissance of coal. Some experts project that the only use for coal in the near future will be in the steel industry. This has nothing to do with physical shortages--coal provides 35 percent of the world's electricity, and the U.S. has 250 years worth of supply at current consumption rates--but rather with national and international policies (and binding treaty commitments) to reduce harmful emissions that cause air pollution.¹⁷ Still, as gas prices escalate, the

prospect of bringing new coal plants on stream, or the cheaper option of increasing the output and efficiency of existing ones, becomes more attractive. Montana has ample reserves of low sulfur coal, but its relatively low thermal content and relatively high transportation costs, coupled with advances in scrubbing technology, does not provide the state with much of a competitive advantage.

As an exporter of electricity, Montana does not have a supply problem as such. In a normal year, more than half of the electricity generated by the Missouri River hydro dams and coal plants in the state is sold in external markets, mainly California. However, the decoupling of generation and transmission resulting from restructuring legislation and MPC's subsequent divestiture means that *all* the power produced by PPL in Montana will soon be a wholesale product in an unregulated market. Unless merchant plants inside or close to California are built to meet that state's growing demand, there is no compelling reason to suppose that additional generating capacity in Montana would be dedicated to in-state consumers.^{xxiv} To counteract this possibility, the legislature may seek ways to create a cost-based, in-state preference regime for new generation plants to meet future "domestic" demand. This is problematic, as it may require substantial investment in transmission capacity as well, and it would be an ironic departure from reliance on market forces. (See Part V.)

OThe (non?) Competitive Climate for Small Customer Choice

On October 27, 2000, the Montana Public Service Commission issued a Request for Comments on extending the transition period for 2 years. In doing so, the PSC pointed out that the percentage of all MPC customers moving to retail choice is less than half of one percent, that 23 of the 25

^{xxiv} Existing transmission system constraints, and the associated phenomenon of congestion pricing, may have a significant effect on PPL Montana's eagerness to supply power to in-state distributors.

rural electric cooperative utilities have opted not to open their customer territories to competition, and that the only competitive supplier to have offered residential and small commercial customers an attractive alternative to MPC's moratorium rates --Energy West Resources, in Great Falls--can no longer do so, given recent increases in wholesale prices in the West. The Commission also noted that the Northwest Power Planning Council expects the demand-supply imbalance noted above to persist for several years, and that the Federal Energy Regulatory Agency has not yet implemented its goal of open, independent, regional transmission systems, which, in a view that the PSC shares with many interested observers, are a prerequisite for workable wholesale and retail markets.

This situation leaves residential and small commercial customers in the Montana Power Company's service territory without a meaningful or rewarding choice to make. MPC's customer education efforts--a requirement of the law--have tapered off significantly, as might be expected in light of so much unpredictability.^{xxv} The company's pilot projects, once projected to have shepherded over 10 percent of small customers to an alternative supplier by now, have been brought to a standstill.^{xxvi}

There is no shortage of competitors to provide power to large industrial firms in MPC's distribution territory that opted to leave the fold of regulated prices after choice became available to them in 1998. As of mid-October, 2000, there were 21 companies licensed to supply this class of customer. Some of these firms are large, out-of-state corporations, including Enron and Idaho Power, while others are small governmental entities in Montana, such as the City of Helena and the town of Philipsburg, or aggregated entities such as the Montana School Boards Association. In stark contrast, there

^{xxv} Section 69-8-203(4), MCA.

^{xxvi} The TAC's statutory obligation under section 69-8-501(1) to review these pilot projects in its year 2000 report is consequently moot.

are currently only four companies that have obtained licenses to serve residential and small business customers in MPC's distribution territory as well as the area in northwest Montana formerly served by PacifiCorp that which is now the territory of Flathead Electric Cooperative and its affiliate, Energy Northwest Incorporated. Two of these suppliers have not yet complied with all of the PSC's license requirements.¹⁸

Since July 1, 1998, approximately 27 percent of Montana Power's pre-choice retail loads have moved to the competitive market. Large customers account for most of this movement; however, residential accounts are included in the total. Current market prices have caused Energy West Resources to not renew contracts with residential customers, who are moving back to regulated supply as allowed by the law. There is some new activity in the market; for example, aggregated groups of commercial customers continue to enter into contracts with competitive suppliers and a small number of large customer accounts have recently done so as well.

The situation in Montana is not unlike conditions elsewhere in the country. For example, even in Pennsylvania, regarded as the exemplar of retail choice to date, analysts point to a dearth of suppliers in the residential sector as a problem inhibiting further advances toward effective competition. A Massachusetts power marketer points to the following factors to explain the tepid response of consumers in his neck of the woods:¹⁹

- The majority of residential customers have little interest in switching providers.
- There's comparatively little money to be made by selling power to residential customers.
- It costs a significant amount of money to attract each residential customer.

- State markets set up to protect residential consumers in the short run are dampening the interest in competition.

At the heart of the supply crisis in California and underlying the anxiety in other states like Montana is a seeming conundrum: Price caps intended to shield consumers from higher prices may have the effect of prolonging the shortage of generation and thereby further increase the real cost of electricity for all. The price moratorium in Montana law that prevents MPC's residential customers from suffering the sting of rising prices and shifts some of the transition risks to utilities also has the effect of deterring power suppliers from entering the market, since they cannot compete with the price in MPC's buyback contract with PPL Montana.^{xxvii} When that contract expires, the market will be theoretically ripe for competition. But will anyone regard MPC's customer bloc as a plum?

Default Supply: the Safety Net with At Least One Hole

Montana's restructuring laws provide for a supplier of last resort--the default provider--for those customers of a public utility, e.g., the Montana Power Company, who do not choose an alternate supplier. By definition, the default supplier can be one of two things: a distribution services provider (a utility with poles and wires), or an entity that has been designated as a default supplier by the Public Service Commission.^{xxviii}

The PSC is required to establish an application process and guidelines for the designation of one or more default suppliers for each utility's distribution territory.^{xxix} The Commission met a statutory deadline of December 1,

^{xxvii} PPL Montana supplies MPC at \$22.25 per megawatt, and expected a gradual decline in the amount of electricity required at this price as customers exercised choice during the transition period.

^{xxviii} Section 69-8-103(8), MCA

^{xxix} This currently applies only to MPC, and Energy Northwest Inc., the affiliate of Flathead Electric Cooperative.

1999, for the promulgation of rules governing the licensure of default suppliers.^{xxx} However, it split apart the concomitant task of determining just how one or more licensees would be designated as a default supplier. In late 1999, the Commission sponsored a number of informational roundtables on this topic to gather input from interested parties. The PSC offered two models of a selection process: through competitive bidding, in which price is the leading or even sole criterion, or by application, using a bundle of selection criteria that include subjective public interest goals as well as price.^{xxxi} There was considerable disagreement over how best to make a selection; the meetings and a formal public hearing were inconclusive. In February, 2000, the Commission suspended its procedural schedule for the review and consideration of applications for designation as a default supplier. Prior to this deadlock, the TAC passed a motion at its November 5, 1999 meeting requesting the PSC to present its proposed designation methodology to the Committee in September, 2000. This did not happen, and the task remains undone. Moreover, other difficult and time-consuming elements of MPC's still-changing transition plan dominated the PSC's procedural calendar.

The rules for licensing default suppliers are required to "promote and facilitate the development of a competitive market for electricity supply."^{xxxii} The Legislature did not want to create a situation in which the default supplier has a competitive advantage over a genuine competitor; rather, the default supplier ought to be a customer's last--not first--rational choice. In accordance with this philosophy, the law provides that a default supplier *may not*: sell power to out-of-state customers; sell power to large customers; sell or engage in marketing of power in the wholesale market;

^{xxx} A.R.M. 38-5.6007

^{xxxi} Such as offering a "green" product; i.e., guaranteeing the customer that a certain percentage of the electrons on offer were derived from a renewable source of energy.

^{xxxii} Section 69-8-416(1), MCA

sell anything *but* electricity; or own generation--unless it is also the distribution services provider.^{xxxiii}

Another section in the law^{xxxiv} stipulates that at the end of the transition period a local government that has been licenced by the PSC as an electricity supply may, with the PSC's approval, become the default supplier for customers within its jurisdiction.^{xxxv} This implies an ongoing role for default supply. Yet another section reinforces this interpretation by stating that upon revocation of a default license, the default supplier status reverts to the public utility.^{xxxvi} A Memorandum issued by the Consumer Counsel reaches a definite conclusion:

The utility is initially the default provider, the default supply function lasts beyond the transition period, and there is nothing in Montana statutes which would require the Commission to select an alternative supplier as default supplier.²⁰

If the purpose of the default supplier is to ensure continued delivery of electricity to consumers who are content to stick with the incumbent utility, no problem, but if there is additional expectation that "regulated default service" means anything different from the ongoing regulation of transmission and distribution services and charges, which remains the case with *any* supplier, then there may be a very significant problem indeed. Put more simply, regulated default service does not necessarily mean a lower cost to consumers once the default provider no longer has any generation facilities, or an "affiliate supplier". The law mandates that if the transition period is extended, the customers' distribution services provider (again,

^{xxxiii} Section 69-8-416(2)(3) and (4), MCA

^{xxxiv} Section 69-8-203(2), MCA

^{xxxv} The incumbent distribution utility--MPC--is obliged to propose in its transition plan to the PSC a method for assigning non-choosers outside local government jurisdictions to a default supplier.

^{xxxvi} Section 69-8-210(2), MCA

MPC or its successor) **shall** "use a mechanism that recovers electricity supply costs in rates to ensure that those costs are **fully recovered** (emphasis added).^{xxxvii}

The need to resolve the default supply quandary has taken on new urgency, as it appears more and more likely that MPC's residential customers will not choose another supplier anytime soon. The PSC, at the time of this writing, is poised to exercise its statutory authority to extend the transition period to June 30, 2004. In its aforementioned October 27 announcement, the Commission states that "Today, more than 2 years into the transition period, it seems unlikely that workably competitive electricity markets will exist by July 1, 2002 for Montana's retail electricity customers," and it has invited public comment on just what mechanism the Commission should use to allow MPC to recover the costs of acquiring power supplies during the extended transition period.²¹

Confronted with this looming challenge, the TAC decided--by default--to not make any recommendations to the 57th Legislature for statutory change. For the time being, the Montana Power Company is the default supplier. If and when NorthWestern Corporation becomes MPC's successor, it inherits the appurtenant obligations. Either party will have to meet their obligations by obtaining electricity in the market. Regulated prices for the default load are no longer tied to the costs of production. This is the hole alluded to in the heading above.

Another part of the safety net was rendered ineffectual by a confluence of state law and federal policy. The Montana Electricity Buying Cooperative (MEBC), was created by Senate Bill 406 in the 1999 Legislature for the sole purpose of supplying customers as a default supplier.^{xxxviii} The MEBC is a

^{xxxvii} Section 69-8-310(3)(c), MCA

^{xxxviii} Sections 35-19-101 et. seq., MCA

non-profit, tax exempt body similar in form (but not in experience) to the rural electric cooperatives in the state. The MEBC is the only entity thus far that has expressed and maintained a positive desire to serve as the default supplier for small customers in MPC's service territory. However, the expectations driving the Coop--that it would qualify for low cost "preference" power from the BPA, and that the PSC would designate it as the default supplier--have not been realized. In late December, 1999, the BPA issued a decision that its lowest cost product, known as "preference power", could only be obtained by a public entity that (1) has an obligation to serve (i.e., it *is* the supplier of last resort); and, (2) owns distribution facilities (i.e., poles and wires). The rationale for this decision was spelled out in a lengthy "Standards for Service" document²², but the main thrust of the argument regarding the distribution facilities requirement is that this is the only way that Bonneville can be assured that the customers *it* serves will not be gouged or otherwise disadvantaged by a separate, for-profit distribution utility.

The BPA's decision nixed MEBC's chances to become the default supplier, at least temporarily. The Coop board has since appealed Bonneville's ruling in the ninth circuit of federal court. Under current Montana law, the MEBC is expressly forbidden to own poles and wires, so only a reversal of BPA's policy, by the court or by the agency itself, or a change in state statute, will enable the Buying Cooperative to function as intended.

OBonneville Power: A Vulnerable Giant?

The Bonneville Power Administration provides about half the electricity and nearly 80 percent of the high voltage transmission services in the Northwest. The approximately 8,000 megawatts generated by 29 federal hydroelectric dams and one nuclear plant in the Columbia Basin has been the lowest-cost in the nation. Bonneville's Power Business Line sells electricity to 130 utilities and 8 aluminum plants (known as Direct Service

Industries, or DSIs), including Columbia Falls Aluminum Corporation (CFAC) in Montana.²³ BPA is a self-financing agency. It covers its operating costs and services its multi-billion dollar debt to the U.S. Treasury through sales of electricity and transmission services. Almost all of Bonneville's 20-year power sales contracts expire at the end of September, 2001. The agency instituted a rate case proceeding to establish the price for new contracts for the period 2002-2006 and beyond. This "subscription strategy" relies on a delicate balance of interests among the agency's major customer groups-- Public Utilities, Investor-Owned Utilities (IOUs), and DSIs.

Bonneville does not have enough power to serve as a safety net for all the region's residential and small farm consumers. It has had to allocate its supplies according to federal laws and policy guidelines, such as the Standards for Service requirement mentioned above. Without this provision, the agency argues, all sorts of new "Publics" would be formed in the region, and BPA would be obligated to serve them. The MEBC is a case in point: it was formed expressly for the purpose of gaining access to below-market prices for residential customers in Montana. The Coop figured it would need 110 average megawatts (aMW)--more than what's readily available given Bonneville's current supply and allocation commitments. Since it can't grow its resources, the BPA would have to buy more expensive power from the market to augment its supply. This would drive prices up for everyone served by Bonneville. As the agency's Montana liaison put it in a letter to the editor last July, "Virtually every type of BPA customer is looking for more benefits than the federal system can provide from its limited supply."²⁴

Another facet of Bonneville's operation is the Residential Exchange Settlement with IOUs. In cooperation with state officials, BPA has arrived at package deals (combining power and cash payments) to settle obligations to the residential customers of the IOUs in the region. In July, 1999, the utility commissioners of the four Northwest states requested that BPA provide 1900 aMW of total benefits. Montana Power Company's customers

were awarded a small portion (24 aMW) of this amount--a little more than half of what was requested. This was and remains a controversy, but it is quite small in proportion to the larger issues at stake, most of which swirl around demand outstripping supply for an increasingly scarce resource--cheap power. (For more information, see Appendix 2.) As the agency's debt service is gradually pared down to nothing, and operational costs are kept low, the spread between market prices and cost-based rates is expected to be very significant indeed. According to the Northwest Power Planning Council's calculations, the benefits to the region over the next 25 years range from zero to over \$25 billion.²⁵

These benefits are increasingly at risk. The California crisis provoked three of that state's Congressional delegation to request the Department of Energy to suspend BPA's subscription process and to also order the General Accounting Office to investigate Bonneville's alleged profiteering during the summer months.²⁶

A spokesman for BPA warned that holding up subscription would "throw the Pacific Northwest system into utter chaos." The Northwest Congressional delegation, including Senators Burns^{xxxix} and Baucus, defended Bonneville's actions, reminded Energy Secretary Richardson that Californians are the beneficiary of emergency power supplies from BPA^{xl} and asserted that the federal agency should not be held responsible for the failure of California's electrical restructuring legislation.

^{xxxix} Senator Burns, on July 11, 2000, blasted BPA for decreasing power generation in the Northwest and requested FERC to investigate price gouging by power companies. BPA Administrator Judi Johansen issued a detailed response to the Senator's allegations on the following day.

^{xl} Bonneville's sales to California amount to less than 1 percent of the power market there, but they are crucial to the avoidance of blackouts.

Because Northwest customers have first call on BPA energy under the 1964 Regional Preference Act,^{xli} BPA has the ability to call in its contracts for out-of-region sales. Exports to California may stop. The agency needs to purchase approximately 3,200 MW to meet its pre-existing and new subscription contract obligations. Pressure on an already over-strained system is mounting. BPA's executives have identified 6 threats to the system's political and financial stability.²⁷ In abbreviated form, they are as follows:

- Northeast-Midwest Coalition in Congress views BPA as a subsidized means of giving the Northwest a competitive advantage in attracting and retaining heavy industry. Their goal is to require Bonneville to charge market-based rates. The group is also seeking to form strategic alliances with environmental organizations seeking to dismantle dams on tributaries to the Columbia River, which would reduce power output and raise costs.
- Financial health: the demand for below-market prices stresses the already fragile allocation system, and the rising, somewhat incalculable costs of salmon recovery and other fish and wildlife habitat protection obligations further endangers BPA's ability to meet U.S. Treasury payments.
- National energy legislation, which will inevitably include a Northwest "title" that could restructure Bonneville, along with the present difficulties of designing and implementing a regional transmission organization under FERC guidelines (more on this below).
- California, with its unslaked demand for energy and its demanding, numerically powerful delegation in Congress.
- Mergers and acquisitions, amounting to oligopolistic market conditions that result in higher costs for everyone, including Bonneville (since it is and will remain a net purchaser of power).

^{xli} Public Law 88-522

- Northwest residents themselves, organized into public utilities, investor-owned utilities, and direct service industries, fighting over the allocation of a limited resource. Internecine conflict among customer groups will stymie attempts to protect the region from external foes.

For the time being, the potential "chaos" of a subscription holdup has been averted. BPA announced in early November that it has entered into a number of contracts with Publics, IOUS, and DSIs, some for 5 years, others for 10. The longer term threats to the Bonneville system persist, however. The next Congress and Administration may move to reconfigure BPA and the other federal power marketing authorities so that they are compelled to shop electricity to the highest bidders in the West.

OReliability and Access: The Role of Regional Transmission Organizations

Retail competition cannot materialize until wholesale competition is in effect, and genuinely competitive conditions at the wholesale level require open access to the country's long-distance transmission systems. In December, 1999, the Federal Energy Regulatory Commission issued an order calling for the establishment of Regional Transmission Organizations (RTOs) that will give power marketers equal access to high-voltage power lines. The main goal is to prevent utilities that own the lines from giving preferential access to affiliates. RTOs will help fulfill other purposes as well, including enhanced transmission system reliability (through coordinated planning for expansion and maintenance outages) and cost reduction by eliminating the "rate pancaking" that occurs when electricity is wheeled across multiple jurisdictional boundaries.

An RTO is an area-specific system that manages the grid to ensure independent operators' access to the wholesale market. While FERC does not dictate the details of how RTOs are to operate, it has set forth general guidance that all RTOs must: maintain and enhance the reliability of the transmission network under its control; provide sustainable customer benefits; facilitate and promote open bulk power (wholesale) markets; accommodate the maximum variety of transmission ownership structures, including independent transmission companies; accommodate the requirements for retail access as ordered at the state level; and, assure public involvement in the process for creating the organization.

On October 17, 2000, nine electric utilities serving customers in eight western states filed a proposal with the FERC to form a non-profit organization called RTO West. This independent system operator will oversee and operate--but not own--the systems of Bonneville Power, PacifiCorp (now a subsidiary of Scottish Power), Idaho Power, Avista Corporation, Montana Power Company, Portland General Electric, Puget Sound Energy, and Nevada/Sierra Pacific. The nonprofit RTO West will have operational control of over 30,000 miles of transmission lines stretching across Oregon, Washington, Montana, Nevada, Idaho and parts of California. The system is valued at about \$1 billion.

The RTO West proposal submitted in October was actually the first part of a two-stage application. The initial filing entailed a governance proposal (dealing with structure, trustee selection and compensation criteria, committees, and a code of conduct. Also included in the information was a detailed assessment of "lessons learned" from the California Independent System Operator; RTO West does not want to encounter or create for itself structural problems that have added to California's pricing predicament. The second, more detailed part of the filing will address tariff and rate structures, congestion management, and other key operational components.

This should be ready in the spring of 2001. FERC wants RTOs to be operational by December 15, 2001, but this goal may not be attainable.

RTO West is a hybrid form of organization, because it involves a non-profit federal agency, Bonneville Power, and a number of for-profit utilities.^{xlii} Six of the nine IOUs in the region, including Montana Power Company, have proposed to form a for-profit company called TransConnect, which will own or lease the members' transmission facilities. By themselves, these six would have been too small to carry much weight in an organization including the behemoth BPA and the other regional giants, PacifiCorp and Idaho Power. In combination, however, the TransConnect group constitute a large transmission unit.

In the wholesale energy commodity market, transmission systems are a vital component. High-voltage lines (and natural gas pipelines) have to be positioned, sized, and maintained properly to allow genuine competition to develop. A recently issued study from Cambridge Energy Research Associates observes that while massive new investment is being made to build new power plants, only minimal investment is being made on the transmission side to allow this new supply of power to move to markets where it is needed.²⁸ A utility executive underscores this point:

Transmission remains the single area of greatest concern. These systems were designed and built to support a different business model than exists today. They simply can't be expected to handle interregional flows.²⁹

The reliability of the regional transmission grids is essential to basic economic security and social stability as well as a functioning market. Because electricity cannot be economically stored--there is no "inventory" or warehouse of power--reliability means, above all, keeping generation and

^{xlii} Federal law does not permit BPA to engage in for-profit business.

load in balance, via system control centers, so that such occurrences as power outages and curtailments are temporary and manageable. It is not known yet what relationship RTO West will have with a regional reliability council or similar organization with responsibility for more technical and longer-term aspects of the transmission system, such as the maintenance of reserve margin. At present, Montana is located in the Western Interconnection, a multi-jurisdictional grid that is managed by the Western Systems Coordinating Council (WSCC), but the Council's "parent" affiliate has proposed federal legislation to establish a new organization with mandatory standard setting because the rigors of the restructured environment require greater certainty.^{xliii} In any event, RTO West will be required to operate the system in accordance with overarching national or federal reliability criteria.

Regional Transmission Organizations will be complex entities that bear responsibility for a number of highly important (and highly technical) aspects of the transmission grids that are the highways for electrons. RTO West is the culmination of hundreds of meetings of engineering and policy experts. Still, it is too early to say with certainty that RTOs will succeed, and Bonneville Power's participation in RTO West, while essential, nevertheless adds to the technical fragility as well as the political vulnerability of the construct. There are some energy experts who believe that RTOs may be a waste of time. According to a Georgia utility executive, the FERC ought to be looking to Congress to step up the pace toward an integrated national electricity network. RTO's are "an interim step and it's a silly step. You're going to see blackouts-a-go-go until we start thinking about a national grid."³⁰

^{xliii} The North American Electricity Reliability Council (NERC) was formed by utilities in 1965 after an historic blackout in New York City that affected the entire Northeast. NERC developed a voluntary program of regional grid management rules. WSCC is a NERC affiliate that functions in similar fashion to the Security and Exchange Commission; that is, as a self-regulating stakeholder organization.

OImagined futures.

As the restructuring process continues to unfold, two contending scenarios are beginning to materialize on opposite ends of the spectrum of Montana's economic possibilities. The first is the worst--although not necessarily the most probable. Incumbent distribution utilities would obtain supplies at a competitive rate in the regional market, but their customers would have nowhere else to shop for electricity. The prices that the vast majority of Western Montana customers would have to pay would be determined many miles away, in population centers that are already accustomed to paying considerably more than we do now. Cost-saving innovations and new products might never be developed or shared in Montana. Consumers would be stuck for years with paying for stranded costs, and then face higher electricity bills to boot. In short, former MPC customers would be hostage to a *de facto* monopoly until such time as energy entrepreneurs figure ways to carve out sustainable niches in the retail market.

In contrast, the best case scenario is one in which consumers can choose from a full array of low-priced competitive packages that include safe and reliable electricity and related services, such as conservation and energy efficiency consultation. Prices would reflect real costs, but also consumer values and tastes. For example, a certified "green" product could carry a small premium (or discount) different from the price of electricity from a "brown and dirty" source of energy. By investing in fuel cells and gas-fired turbines, communities of aggregated residential and small commercial customers could opt for greater energy self-reliance in lieu of continued dependence on regionally integrated grids. The economic development opportunities in distributed generation, including capital investment, new jobs, and spin-off enterprises, would be found to dwarf the realizable gains from boosting the output of existing coal plants, building new ones, and upgrading long-distance transmission lines.

V. What is to be done?

The Transition Advisory Committee is charged with the task of recommending to the Legislature measures that will "promote electric utility restructuring and retail choice of electricity suppliers."^{xliv} The Committee does not operate in a vacuum, and has in the course of the past interim endeavored to consider its duties in the context of decisions and events outside its control. In general terms, the TAC has been presented with arguments and perspectives that could be categorized as follows:

STEP ON THE BRAKES. Delay the transition process, by extending the period during which residential and small customers are somewhat protected from adverse conditions in the market, and provide a means by which large industrial consumers can return, temporarily or indefinitely, to a regulated price environment.

STAY THE COURSE. The "prices crisis" is a short-term phenomenon. Ride it out; the fundamental principles of restructuring are sound and the current problems are both transitory and, if markets are allowed to develop further, self-correcting. A number of Montana businesses made the imprudent decision not to pursue multi-year supply contracts, and are suffering the consequences, but these same firms, as well as others, benefitted from choice and expect to do so again in the future. Besides, national restructuring legislation is coming. There is no turning back.

STOP THE ENGINE. Find reverse. Re-regulate, with price caps and a redefinition of what constitutes a public utility, or repeal the restructuring laws altogether. There has to be a way for Montanans,

^{xliv} Section 69-8-501(13), MCA

through legislative action, to regain control over a source of supply of electricity in the state. Without the exercise of regulatory authority Montana's economic destiny will be determined by out-of-state corporations answering to price signals and stockholders in faraway places.

Given its statutory mission to facilitate rather than obstruct the transition to choice, the TAC is not positioned to favor going backwards. The Large Customer Group representative on the Committee has asserted on several occasions that his clients, among whom are firms that were hit hard by recent price spikes, are still solidly supportive of restructuring. However, before digging into the sand or plunging ahead in one direction or another^{xlv} policymakers on the Committee are in a position to refocus their attention on basic goals, presumed here to be: price stability, customer choice, and, through the combination of price changes and behavioral changes at the margin, market transformation. Underlying these is a more fundamental goal, easily characterized as an economic and social necessity: reliable delivery of electricity at affordable prices for all classes of customers. In short, keep the lights on for everybody. What follows is a series of possible steps in this direction.

1. Deal With Unanswered Questions.

The overriding question is whether restructuring is going to work or not in Montana, and what the economic and financial consequences will be, but there are others embedded in the transition process itself, as evidenced by the suspended activities mentioned in Part I of this report. To better understand what options the Montana Legislature has in the 2001 session, it is useful to briefly summarize in Question-Answer format some salient

^{xlv} or going in several directions at once, like California...

uncertainties that beg resolution. Each question is linked to a probable source or venue for its resolution.

~ *What is the extent of the Public Service Commission's authority with respect to Montana Power Company's divestiture of its energy assets and businesses?* Both the PSC and the MPC acknowledge the distinction between asset sales and stock sales; in the latter instance, MPC argues that the Commission has no jurisdiction, but the law is not crystal clear, and the PSC has asserted authority over similar stock transactions in the past. There is still a possibility that the PSC will have much to say about the disposition of MPC's above-book value proceeds. The Large Customer Group and others assert that regulated utilities are not like any other business, in that rate-setting processes have assured MPC and its shareholders of cost recovery and a fair return on investment. Customers therefore have a legitimate stake in whatever profit accrues to the company through divestiture. MPC executives are adamant that shareholders have borne the risks associated with their investment and are therefore entitled to all the financial rewards. The absence of clear authority in Montana's statutes makes it likely that litigation will ensue.³¹ Unless the 57th Legislature acts to clarify the role and scope of the Public Service Commission regarding oversight of MPC's transactions, look to the courts for a resolution of this issue.

~ *Who will serve as the provider of last resort--the "default supplier"--and for how long, and under what conditions of law, policy, and market environment?* The Legislature will have to grapple with a situation in which there is no regulated source of electricity in Montana, so the default supplier will be purchasing power from the market and providing it to consumers at a regulated price that reflects the market. Whether the default supplier is a non-profit entity, and investor-owned utility, or some

other party, the costs the supplier bears for providing the energy must be fully recoverable. The risks are great, as market prices and loads will fluctuate. Spokespersons for MPC have asserted that there will always be a need for a default supplier

--someone to provide power to customers for whom competitive supply is not available, or who are in transition. The utility has stated that the loads of a default supplier should diminish over time because an increasing number of customers will find advantages in the competitive market.

Look to the rules that the PSC is obliged to construct for designating default providers, and listen for legislative proposals to enable regulators and distribution utility interests to fashion a means for the default supplier to buy power forward, and on a long-term basis to minimize cost impacts on customers yet remain flexible and responsive to market conditions.

~ When will effective competition in the retail market materialize in Montana? What will it look like? The Public Service Commission is obliged by law to "decide if there is workable competition in the electricity supply market by determining whether competition is sufficient to inhibit monopoly pricing or anticompetitive price leadership." The statute goes on to say that "In reaching a decision, the commission may not rely solely on market share estimates."^{xlvi} It is quite possible if not highly probable that the default supplier will be serving most of MPC's former residential customers at the end of the transition period. It is also possible that that same supplier, since it does not own any generation itself, will have entered into a multi-year contract with a single few power marketing firms to serve the load. It is also possible that several marketers will bid for differently shaped "chunks" of the whole, but in any event, probably only a few suppliers will dominate

^{xlvi} Section 69-8-403, MCA

the market. Is this effective competition? If the PSC finds that it is not, what difference will it make?

The TAC also has a similar statutory obligation--to consider the need for measures to prevent "anticompetitive practices". Among the criteria the Committee must use to evaluate effective competition are "the existence of sufficient markets and bargaining power to the benefit of smaller customers..." and "the level of interest among electricity suppliers..."^{xlvii}

The transition period has so far not offered much grist for consideration: there is no evidence of anti-competitive practices, but there is also scant manifest interest among suppliers and not much noticeable bargaining power that will benefit small customers.

The current situation also raises questions about the degree of competition at the wholesale level. At present, there are only a few big players in the regional market, and across the country mergers and acquisitions are creating conditions of market power in which a relatively small number of corporate giants could maintain prices above competitive levels for an extended period of time. (They might also "game the system" by withholding their power to gain maximum value at times of critical need.) In addition, these companies may have the intelligence-gathering and financial wherewithal to buy up smaller firms with innovative technologies, or prevent these new technologies from becoming commercialized. This longer-term problem is of regional and national scope, but it could affect Montana directly. Absent increased competition in wholesale markets or the default suppliers' acquisition of generation assets, the supplier of last resort will become a regulated middleman monopoly. Local governments or the Buying Cooperative may be designated as default providers, but as such neither entity is allowed to build or buy its own power production facilities. Is this what the architects of restructuring intended?

^{xlvii} Section 69-8-501(12), MCA

~ *What will prices be after MPC's contract with PPL Montana comes to the end of its term?* In the near term, they will be higher than what consumers are paying now. Nobody knows how much higher. At its October 6 meeting, the TAC took a look at a published chart that compared prices across regions. The index price for next-day delivery at the California-Oregon Border (COB) was \$116 per Megawatt hour (Mwh), which was 2 1/2 to 3 times the price at other key locations in the Midwest, the South, and the Northeast.³² Historically, the COB has been the place to find the country's lowest cost power; now it's the most expensive. Current wholesale prices in the Northwest are about five times higher than they were a year ago. Nearly every utility in the region is in the process of seeking rate hikes to offset higher supply costs.

Future prices hinge on the source and availability of supply. If the default supplier qualifies for Bonneville products, a portion of the price will be cost-based, at least for awhile. If the default provider is an investor-owned utility, like MPC or NorthWestern Corporation, the price is more likely to be market-based. A series of wet winters and normal spring runoffs, in combination with added generation capacity in California and the Southwest, could help keep prices down, as would a tapering off of economic growth rates and more energetic attempts to conserve energy in homes and businesses. In contrast, continued drought would likely sustain higher prices, as the hydroelectric portion of the regional energy supply system depends on ample water levels. Continued high demand for natural gas to fuel new turbines, and the limited capacity of pipelines to carry the gas to market, will also put upward pressure on electricity prices across the board.

There are other prices to be concerned about: the transmission and distribution charges that will remain regulated, as well as taxes.^{xlviii}

NorthWestern Corporation executives attest that they will not bring new rate increase requests to the PSC in the near term, to offset the above-book value premium they have offered MPC for its electricity and natural gas utilities. Some observers do not believe that this is a financially viable position to take, and expect the new owner will be compelled to seek rate increases. Whether the PSC would grant the rate increase if one is requested is an open question, the resolution of which might very well be reached in court.

Still, not much has changed yet for residential and small commercial customers of MPC. Regulated rates for the delivery of electricity and natural gas continue to climb, but consumers are protected from price increases for electricity itself by the rate moratorium codified in state law.^{xlix} Without this provision, rates might have already gone up significantly. However, this protection is temporary. Legislative attempts to make price controls more permanent would require draconian decisions and potentially enormous expense. (See Legislative Options on page 46.)

2. Pursue General Strategies of Adjustment

The following are conceptual opportunities, not formal proposals, to narrow the spread between the current (advantageous) moratorium price and the prospective (disadvantageous) market price for power. They include

^{xlviii} MPC, for example, filed a rate increase request with the PSC last August for \$38.5 million. If passed, this would add approximately 12 percent to the monthly bill paid by residential ratepayers, according to the company's October, 2000 bill insert, *Montana Energy*.

^{xlix} Section 69-8-211(6), MCA

measures to shape consumer demand, augment supply, and deal more effectively with the default provider situation.

First, a general strategy could incorporate a team approach to take full account of the different parts of the electricity system that require attention. For competition to flourish, there has to be sufficient generation, adequate transmission lines, and an effective RTO. For distribution utilities to hedge against price spikes, they must have the ability--and the market savvy--to enter into multi-year power supply contracts. To achieve this, generation companies must be willing to bid supplies into a forward (or futures) market. The prudent course of action might be to institute, via a cooperative process that blends policy directives with statutory changes¹, *gradual* steps toward full-scale market price exposure. This approach would allow industrial customers and the default supplier to lock in supply contracts for 3-5 years right away, rather than wait for 2 years and face a prices crisis of disastrous proportion.

To affect demand:

- ' Stimulate investments in distributed generation to meet localized needs. This change in the way power is generated and delivered would require consumers to rethink both the quantity and timing of their energy uses.
- ' Accelerate conservation measures to reduce consumption levels. Develop methods of demand responsiveness, such as voluntary curtailment, demand-side bidding, or paying people (through credits or rebates) not to consume.

¹ If any statutory changes are indeed necessary. Some people think so, others don't.

To augment supply:

' Build new generation, or increase the capacity of current generation facilities. There are three basic types to consider: (1) conventional, coal fired plants, such as those located in the Colstrip area of southeast Montana; (2) gas-fired turbine generators, such as Continental Energy's proposed 500 megawatt facility near Butte^{li}; and (3) smaller-scale, decentralized "distributed" generation, a category which includes micro combustion turbines, wind powered generators, solar panels, and fuel cells.³³ A recent seminar in Billings underscored the importance of moving quickly to ensure that Montana is not passed over by the rapidly developing fuel cell technology industry.³⁴ This type of electricity generation does not involve combustion, and is therefore relatively non-polluting; it also has the advantage of not being dependent on a regional transmission system. However, fuel cells are probably a decade away from being an affordable reality for small businesses and residential consumers, so less exotic types of energy will probably command attention in the near future. As the Chairman and Vice-Chairman of the TAC pointed in a recent editorial:

[T]he Northwest's shortage of power supply and transmission capacity affords an opportunity for Montana. It represents an opportunity to think and plan on the prudent development of our state's abundant wind, solar, natural gas and coal supplies as a means of meeting the region's growing demand for electricity.³⁵

^{li} Continental Energy is a former subsidiary of MPC; it was sold to BBI Power in 2000. The company plans to file an application under the Major Facility Siting Act in early 2001, and hopes to bring the plant on line before the end of 2003.

Nearly 40 MPC customers have installed solar systems that allow Montana has been described as "the Saudi Arabia of wind", and the Rocky Mountain Front offers a case in point. The Blackfeet Community College in Browning received a U.S. Department of Energy grant which, with other local financial help, has resulted in the construction of a 100-kilowatt wind generator that is connected to the Glacier Electric Cooperative's distribution grid. The wind turbine is expected to produce between 200,000 and 300,000 kilowatt hours annually. The college will receive credit for the energy at the Coop's wholesale rate.³⁶

' Construct (or upgrade) transmission lines. The overall "pool" of electricity available to Montana residents could be increased by importing power from neighboring jurisdictions. For example, there is an AC/DC/AC conversion unit at Miles City, where the Western and Midwestern grids interconnect. Boosting the amount of power entering from the east is technically feasible, but it would require expensive transmission system upgrades on both sides of the grid line--in Montana and east of Montana, and there is no telling who would bear that cost. (Moreover, moving energy across the electricity "border" would require FERC approval and would also violate the underlying premise of regional grids, which is to prevent the possibility of a nationwide blackout.)

Another conceivable source of power is Alberta, the only Western Canadian province to have restructured its electric utility industry, and which is currently tied into the Western grid via transmission linkages that first transit British Columbian territory and then go south to California. At present, there are 230 Kilovolt lines terminating in Shelby, Montana, and two locations in southern Alberta, Lethbridge and Piegan. New power plants are planned in the province, but

whether Montana has sufficient load (and load growth potential) to warrant construction of a transborder interconnect for Alberta exports is unknown.³⁷

' Cooperate with other Pacific Northwest states to preserve the cost-based rates and regional preference that are the cornerstone of federal power benefits in the Columbia Basin. The BPA is increasingly under attack by Congressional coalitions of Northeastern and Midwestern states jealous of the economic development advantages embedded in relatively inexpensive power. Of late, the powerful California delegation is also seeking to punish Bonneville, albeit for different reasons. (See page 25.) Montana's governor has joined with other Northwest governors to put forward a plan for greater regional autonomy. More recently, lawmakers from these same four states formed the Legislative Council on River Governance in hopes of finding sufficient common ground to establish a formal regional compact. The practical, long-term benefits of continued cost-based rates and regional preference apparently supercede the ideological devotion to free market principles that is manifested in Montana's electrical industry restructuring laws.

These are not stand-alone, mutually exclusive options for consideration. A sensible approach to the challenges of restructuring may require a combination of several.

3. Apply Specific Legislative Remedies.

As noted earlier, the voting members of the TAC set forth only two official recommendations at their next-to-last meeting in the 1999-2000 interim: to extend the Universal Systems Benefit program for an additional 2 years (to 2005), without changing the amount of money allocated, and to modify language concerning allowable credits for USBP expenditures. No other

action was taken by the Committee, save to reaffirm what is already in the law, which is that the TAC will continue to function until December 31, 2004 (unless the transition is completed before then), and that the Committee will make some sort of recommendation to the 57th Legislature--in 2001--regarding the need for continued default supply. What that recommendation will be, and when it will be made, is not known at this time.

There are other options to consider, some of which have been brought before the TAC for discussion, and others which may emerge in the public debate about how best to weather the storm of controversy surrounding the restructuring issue in the months ahead. Extending the transition period is certain to be a central consideration, and it could, under current structural conditions, conceivably mitigate sharp price increases. But, as has been said a number of times already in this report, the extension cannot insulate residential and small business consumers from rising market prices.

The following legislative options and activities warrant more detailed analysis, but since the Committee did not take them up, I will give them only brief mention here. (They are not presented in any order of importance or feasibility.)

- ' To spur conservation and market transformation, and to help shield low income families from punishing price spikes, increase the amount of funding in the USBP program. The four Northwest governors' 1996 Comprehensive Review recommended a more substantial commitment, 3 percent versus the adopted 2.4 percent of utilities' 1995 sales revenues. California extended its USBP for 10 years, and other states in the West are pumping proportionally more funds into programs to help jump-start the commercialization of new energy technologies.

' To speed the process of bringing new generation facilities on line, reduce or streamline certain requirements of the Major Facility Siting Act. Consider location credits (e.g. through public financing mechanisms, or tax policy) for select types of power generation. Replace the 250 megawatt "trigger" in the Act^{lii} with a total emissions threshold or some other impact factor to prevent or at least mitigate environmental damage resulting from the construction of new power facilities in the state.

' Change the law prohibiting the Montana Electricity Buying Cooperative from owning poles and wires, or formally request that the BPA change its policy requiring a public utility to own a distribution system in order to qualify for preference power, so that the Montana Electricity Buying Cooperative would be in a position to offer consumers cost-based power as a default provider.

' Remove the legal barrier to Rural Electric Cooperatives in Montana serving customers in urban areas, and therefore provide opportunity for more Montanans to take advantage of BPA's cost-based rates as well as enjoy the benefits of being served by a non-profit entity accountable to its member-customers.³⁸ (This would only work if the Coops also owned the wires that deliver the power, and subscription contracts or surplus electricity were available.)

' To provide incentives for new investments in generation capacity, further reduce (or remove) taxes on electrical generation property or lower taxes on transmission and distribution property, keeping in mind that construction or expansion of power plants does not mean that the energy produced will be sold first or exclusively to Montana consumers. Additional tax credits for distributed generation might be

^{lii} Section 75-20-101 et. seq., MCA

in order as well.³⁹ Alternatively, consider adjustments to the kilowatt/hour rate of the Wholesale Energy Transaction tax and to the disposition of WET tax proceeds (currently deposited in the general fund), in an effort to offset higher electricity prices for Montana consumers without distorting the market price or interfering with interstate commerce.^{liii}

‘ A more radical legislative maneuver would be to separate the Missouri River dams from the coal-fired plants in southeastern Montana by the state offering to purchase the hydro system assets from PPL Montana for a fair price. This would allow the private, unregulated utility to continue exporting to California, and to build new, coal- or gas-fired merchant plants to serve large industrial loads, while Montana residential and small consumers could capture the benefits (and suffer the risks) of hydroelectricity. In effect, this would take a portion of MPC customer loads out of the wholesale market, and back into a cost-based regime with geographic limits. This "mini-Bonneville" option is purely theoretical, would require large-scale public financing, and could lead to excessive claims on the system's output; it has not been explored by the Committee. It is also distinct from proposals coming from outside the TAC to have local governments or the state exercise eminent domain authority to acquire generation assets. That prospect prompted a regional energy newsletter to comment that "any sort of condemnation proceeding would likely result in a lengthy and tumultuous lawsuit by PPL Global, and the prospects of tax-phobic Montana repurchasing the assets for more than \$1 billion seem slim to non-existent."⁴⁰

^{liii} See sections 15-72-104 and 15-72-106, MCA, for the tax rate and the disposition of the proceeds, respectively.

VI. Conclusion: Brave New World or A Dimly Lit Future?

It should be apparent to readers that the middle of a muddled transition is a difficult place from which to gain a clear perspective on the next phase, let alone the ultimate outcome, of a restructuring process that actually began a decade ago with federal decisions affecting wholesale markets. Some of the general strategies and specific legislative options in Part V will turn out to be blind alleys or dead ends; others may work. Notwithstanding the confusion and consternation caused by unexpected acts of God and Californians, federal officials and public utility executives, judges and lawyers, it is fair to conclude that the Transition Advisory Committee has learned a few important things thus far:

' *Geography and Demography count.* Montana is physically far-removed from metropolitan areas that will prove to be the most attractive markets to merchants of power. As a sub-market within the multi-state region that reaches from Western Canada to Northern Mexico, the decentralized, largely dis-aggregated nature of the residential and small business customer base in Montana Power Company's service territory is not likely to be regarded as ripe fruit by profit-motivated power suppliers. Moreover, bringing power across the "seam" joining the Western and Midwest grids to supplement the availability of electrons will require upgrades to the transmission infrastructure that already stretches across great distances.

' *California counts.* Until that state's regulatory agencies, legislature, utilities, and customer groups, along with the Federal Energy Regulatory Commission, sort out the mess caused by a dysfunctional approach to restructuring, the wholesale electricity market in which Montana

participates will be destabilized. If and when the sorting out is completed, and regional markets mature, the sheer size and economic dynamism that defines California's position in the Western grid means that wholesale market prices be strongly influenced (if not dominated) by energy demands from the Golden State. A corollary is that overall regional capacity counts too: the deregulation of electricity generation in a period of surplus power would likely turn out differently than what is happening presently, with both California and the Northwest facing shortfalls.

' *Transmission counts.* It is the backbone of the regional reliability system, and it is the lynchpin to the development of a truly national electricity market. FERC has mandated interconnection standards, but states still have the primary responsibility for siting new plants. The continued existence of bottlenecks in and congestion on the interstate transmission grid will constrain the workability of wholesale competition and thus place limits on the genuine exercise of customer choice. New power plants won't rectify supply and demand imbalances unless the transmission system is improved. Conversely, transmission capacity problems could cause PPL Montana to consider long-term supply contracts with default providers and also inadvertently help fuel a boom in distributed generation, arguably the ideal long-term solution to Montana's atypical challenges in a restructured environment.⁴¹

' *The Bonneville Power Administration with its power marketing and regional transmission lines of business counts as well.* So long as BPA's cost-based rates and regional preference policies are intact, at least some Montanans will continue to enjoy some insulation from rising market prices. On the other hand, as long as the BPA is under siege in Congress, and is threatened by demands that it be restructured to better fit a deregulated power paradigm, Montana's prospects for a low-cost default supplier are not very bright. Bonneville is an essential partner in the RTO West, which is in turn vital to ongoing access to a reliable transmission network. Attempts

to gain greater regional control over BPA's energy marketing decisions, such as those being contemplated by the Legislative Council on River Governance, will require in this state a workable reconciliation of opposing principles and expectations. Montana has restructured, the other Northwest states have not, and we all want our fair share of Bonneville's cost-based products and services.

' *Contingencies count for a lot.* The Committee has suffered the opportunity to learn that it is difficult to ascertain and account for something that may happen (or not), for this reason (or that), sometime in the (near or distant) future. Example: the Committee's attempt to evaluate the different ramifications for taxes, regulation, consumer costs, and general reliability resulting from different types of business entities (Coops, cities, and investor-owned utilities) acquiring MPC's energy affiliates went nowhere fast, because nobody who really knew anything could speak up. Their lips were zipped to a binding confidentiality commitment that did not permit public deliberation. It's hard to be proactive in this situation.

' *The central conundrum won't go away.* Intervention in the electricity market to protect consumers from escalating prices also stifles investments that are necessary to prevent even steeper price hikes as well as to develop alternative sources of supply. Achieving genuinely competitive market conditions and actively sheltering market participants from these same conditions doesn't seem doable. Market fundamentalists insist that FERC's interference in wholesale pricing and state-level price caps result in false signals and deter needed investment by raising risk and uncertainty. At the same time, some investor-owned utilities imply that without captive customers and the assurance of cost recovery under price regulation, there is too much risk and not enough assurance of a return on investment to warrant building new generation. It seems utilities and consumers alike want it both ways: customer choice and affordable prices on the one hand, and a guaranteed return on the other.

There are no simple, straightforward remedies to the complex set of problems arising from the new order of business in electricity. The transition to competition may be practically and politically irreversible, but the end results may not be what was anticipated at the outset. The economic impacts of expensive electricity in a time of ever-increasing reliance on ample and reliable power supplies (the so-called New Economy) are difficult to quantify, but few would argue that shortages and price spikes are anything but a disincentive for energy-intensive firms to locate in Big Sky Country. Montana, the regions of which it is a part, and the country as a whole are each at different stages in a state of flux. Everyone is searching for the ways and means to make restructuring turn out right, and not turn into a form of shock treatment with dreadful results.

END NOTES

1. The Montana Power Company delivers more power to more customers than any other utility or Cooperative in the state. MPC's service territory includes all of the larger urban areas, and consequently most of the larger business accounts, as well approximately 288,000 residential accounts. The rural electric cooperatives in Eastern, Central, and Western Montana provide electricity to about 180,000 accounts, and Montana Dakota Utilities, in the easternmost areas of the state, has approximately 30,000. The utilities measure their market size in number of accounts served (bills issued) and not individual customers, whereas the cooperatives collectively supply power to approximately 400,000 Montana residents, or about half the population.
2. Cambridge Energy Research Associates, report cited in Dow Jones **Power Marketing Association Power Report**, October 10, 2000.
3. Alan Weisman, "Power Trip: The coming darkness of electricity deregulation", **Harper's Magazine**, October, 2000, p. 83.
4. **Electric Utility Restructuring Weekly Update**, November 3, 2000 (a service of the U.S. Dept. of Energy provided to staff by the National Council of State Governments, and which can be obtained by visiting http://www.eren.doe.gov/electricity_restructuring_weekly.html).
5. To view the U.S. Energy Information Administration's updated national map of the Status of State Electric Industry Restructuring Activity, go to <http://www.eid.doe.gov/cneag/electricity>
6. Ronald Tipton, an executive with Montana-Dakota Utilities, told an MSU-Billings audience that North Dakota's study group will not be recommending restructuring anytime soon, and that South Dakotans are saying "We will see deregulation in this state over our dead body" (sic). Jan Falstad, "MDU concerned about restructuring, **Billings Gazette**, Nov. 2, 2000. Under rules Oregon adopted in August, 2000, large industrial and nonresidential customers will deregulate beginning in October, 2001, but residential and small business customers will still receive regulated supply.
7. "The Electric Slide", **Governing Magazine**, October, 2000, p. 60. Although Pennsylvania uses a "shopping credit" approach to customer choice, the state's Public Utility Commission set the value of the credits to approximate the market.
8. *Electrical Industry Restructuring in a Nutshell*, Stephen Maly, January 19, 2000; posted on TAC web page.

9. Qualifying Facilities are non-utility generators that sell electric power to utilities under provisions of the federal Public Utility Regulatory Policies Act (PURPA). There are different categories of Qfs, including cogeneration facilities that produce power and heat (or steam) from the same energy source, and Small Power Producers that rely on renewable resources (biomass, geothermal, solar, wind and hydroelectricity). PURPA obligated utilities to connect Qfs to transmission grids and to purchase their electricity output at a price that did not exceed the *avoided cost* of building new capacity.

10. "A Shocking Backlash", **The Economist**, August 26, 2000, p. 49.

11. *Ibid.*, p. 50.

12. FERC's investigation found that power prices in San Diego were "unjust and unreasonable", but the agency also asserted that it lacks the authority to order refunds to consumers. There is some evidence that California-produced juice is being sold out of and back into the state at a higher price. From May to September of 2000, for example, the average wholesale price was less than \$125 per megawatt hour, but over the same period, power sold in response to out-of-market averaged more than \$430. This activity has been dubbed "Megawatt laundering", an alleged multi-company conspiracy to evade California's wholesale price cap, which covers power generated in the state, but not electricity imported from elsewhere. Steve Johnson, "Power rate hikes blamed on swaps between states", **Mercury News**, Oct. 29, 2000.

13. The National Association of Regulatory Utility Commissioners issued an Information Packet on October 13, 2000, entitled "High Natural Gas Prices and Alternative Actions by State Public Utility Commissions". The publication provides fairly detailed assessments of price trends and various means of dealing with the impacts on consumers. It also contains warnings in plain language; for example: "This combination of increased demand and fairly flat supply will likely cause natural gas prices to be much higher than last year through this winter. In addition, colder-than-normal temperatures could cause prices to go even higher before declining after the heating season." (p. 8).

14. Alan Weisman makes these observations in the October, 2000 issue of **Harper's Magazine**: "Even without deregulation, demand would have been a problem. Having overbuilt in the 1970s utilities all but stopped constructing plants and transmission lines, and the computer revolution caught them unawares. As recently as 1993, PCs, cell phones, fax machines, and other high-tech paraphernalia had a negligible effect on supply, but now they account for 13 percent of usage and are estimated to be 25 percent by 2020...So although we had an excess of capacity just a few years ago, suddenly we're using far more and conserving far less." (p. 82)

15. In response to its need to purchase power to meet load obligations, BPA has proposed revisions to its "Cost Recovery Adjustment Charge, or "CRAC" that will add from 15 to 40 percent to the price of power under new subscription contracts. The details are outlined in a November 8, 2000 letter to Customers and Interested Parties from Paul E. Norman, Senior Vice President of BPA's Power Business Line.

16. Steve Johnson, "Power Deregulation Stumbles in Infancy", San Jose **Mercury News**, Sept. 27, 2000.
17. International agreements may have a dual effect. For example, a recent annex to the U.S.-Canada Air Quality Agreement requiring Northeast states and the provinces of Ontario and Quebec to jointly reduce power plant emissions by 50-70 percent in the next 2 years could stimulate short-term demand for low-sulphur western coal, but the accord may also be extended to other parts of both countries following a review in 2004, effectively canceling out the prior stimulus. Source: **CBC News**, webposted Oct. 14, 2000.
18. The four license holders are Energy West Resources of Great Falls, the City of Missoula, and Commercial Energy and Glacier Energy, both in Cut Bank. For more detailed information on each, visit <http://www.psc.mt.gov/gaselec/elec.htm>
19. Matthew Brown, "Slow Transition to Competition", **State Legislatures**, May, 2000, p. 29.
20. Bob Nelson, Memo to Legislative Consumer Committee, February 24, 2000.
21. PSC Request for Comments on Extension of Transition Period, Utility Division Docket No. D2000.10.177, p. 3.
22. Standards for Service Record of Decision, issued on December 29, 1999, by the Bonneville Power Administration, located at <http://www.bpa.gov/power/subscription>.
23. BPA is an important supplier of wholesale power to Rural Electric Cooperatives in Central and Western Montana. Because the Hungry Horse Reservoir plays a crucial role in providing upstream storage on the Columbia system, BPA is required to reserve a significant amount of its electricity output for qualified customers in Montana. Most of this goes to CFAC and Coops under multi-year contracts which predate the subscription process outlined in the text.
24. Gail Kuntz, editorial published in **The Missoulian** on July 22, 2000.
25. Estimate derived from a chart (dated 6/7/99) entitled "We have a lot at stake" and presented by Mr. Steve Wright, BPA Senior Vice President (Corporate) at October 6, 2000 TAC meeting in Helena. Mr. Wright's presentation materials are included in the hard-copy Minutes package on file with the Legislative Services Division.
26. This reaction was greeted with great sympathy by some of Bonneville's other detractors in Congress, such as New Jersey Senator Bob Franks: "Policymakers need to know if BPA has been profiteering at the expense of California consumers. We need to understand who is benefitting from this federal agency, selling 2-cent-per-kilowatt electricity for more than 20 cents into the tight California market." Comments published in **Greenwire/Newsline**, October 12, 2000.

27. State Legislative Briefing by Mr. Steve Wright at BPA headquarters in Vancouver, Washington, July 13, 2000.
28. "Cambridge Energy: US Electric Grid Can't Keep Pace", Dow Jones **Power Marketing Association Power Report**, Oct. 10, 2000.
29. James Donnell, president of Duke Energy North America, "US Industry Faces Boom-or-Bust Price Scenario", Dow Jones **Power Marketing Association Power Report**, Oct. 18, 2000.
30. Joel Gilbert, CEO for Apogee Interactive, a Georgia company, quoted in **Restructuring Today**, October 13, p. 2.
31. As Public Service Commissioner (and TAC member) Bob Anderson commented to the press last spring, "The company will find a buyer and make a deal, and it will come to the Commission. We'll issue a notice to intervene, and we'll be off and running in a contested case...I think it will wind up in court." Quoted in story by Charles Johnson in the **Billings Gazette**, May 22, 2000.
32. Bloomberg **Power Lines**, Vol. 3, No. 195, October 5, 2000, p. 1.
33. The August 5, 2000 issue of **The Economist** contains an overview of the promise of distributed generation entitled "The dawn of micropower", pp. 75-77.
34. See Jan Falstad, "Fuel cells hold lots of promise for home power, the **Billings Gazette**, August 1, 2000.
35. Sen. Fred Thomas and Rep. Joe Quilici, "Power Prices in the Northwest: Some questions and answers", **The Missoulian**, August 21, 2000.
36. In a more general vein, the 1999 Legislature enacted a "net metering " bill to allow a customer of a distribution utility to generate on-site power and deliver it to the local grid for a credit against that customer's net consumption. See section 69-8-601 et. seq., MCA. More than 40 MPC customers have installed power units (mostly solar) that take advantage of net metering.
37. Interestingly, the space between Great Falls and Lethbridge was once a thriving trade corridor, involving shipments of such fuels as coal and rotgut whiskey.
38. Section 35-18-102(2)(e), MCA defines "rural area" as "any area not included within the boundaries of any incorporated or unincorporated city, town, village, or borough having a population in excess of 3,500 persons..."
39. See, for example, existing Energy Related and Ecological Tax Incentives in Title 15, Chapter 32 of the Montana Code Annotated.
40. "Montana 2001 Legislature May Reopen Restructuring Issues", **Clearing Up**, October 20, 2000.

41. If a substantial portion of PPL Montana's generation that is currently serving in-state loads (under contract to MPC) were to be remarketed to out-of-state customers, it would have to be sold on a non-firm transmission basis. At present, there is insufficient transmission capacity in the region to ensure the expansion of *firm* delivery from Montana-based power plants.